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SECURITY INFORMATION

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German Democratic Republic

MISCELLANEOUS METALLURGICAL INFORMATION

activities

at the Bitterfeld Electrochemical Combine and the Maxhuetten (iron foundry) in Unterwellenborn.

The Bitterfeld Combine can produce aluminum with a purity of 99.99. Large orders for aluminum are on hand, the most important of which are for castings for the Soviet corporations (SAGs) and people-owned enterprises. Lately, silumin (with 12% silicon content) has also been in demand. A new furnace with higher smelting temperature is needed for these orders. This furnace has already been ordered and will be delivered soon.

Section IX at Bitterfeld formerly produced magnesium through electrolysis; however, this section has not yet been reactivated. Lately, however, many Soviet visitors (from Weissensee) have been inspecting the section; the production of magnesium is to be started again.

Both the Bitterfeld Combine and the Maxhuetten produce titanium. Titanium iron ore and titanium magnetite come from the Urals; the Kola peninsula supplies titanite. The titanium ore has an ilmenite (TiO_2) content of 4-18%. Unterwellenborn is not very important in the production of titanium, since only ferro-titanium is produced there. The experimental short-shaft furnace, which was the decisive factor in the development of the West Iron Foundry Combine (Eisenhuettenkombinat West), is now used for processing titanium iron ore. No exact figures are available as to the extent of production. The titanium produced at Bitterfeld is shipped as ferro-titanium to the Riesa and Thale steel mills.

The Torgelow iron foundry in Pommern adds ferro-titanium to the gray iron and uses it for tempering. Exact results are not yet available, but it is proved that ferro-titanium is effective in this respect.

The laboratories of the Bitterfeld Combine and the Hettstedt ~~xxx~~ metal rolling mill together are carrying on experiments in the plating of metals with aluminum-titanium alloys. It is said that these platings turned out surprisingly well.

No exact information can be given concerning titanium production at Bitterfeld, since this project is carried on in secrecy and is closely guarded. It is certain, however, that work on titanium is done according to Soviet methods.

A special section at the Bitterfeld Combine is experimenting with the use of titanium or its compounds in the chemical and textile industries.

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